

causes an increase in cellular protein tyrosine phosphorylation; or

(c) a fragment of the amino acid sequence set forth in SEQ ID NO: 5 comprising at least about 25 amino acid residues, wherein the polypeptide upon exposure to mammalian cells, causes an increase in cellular protein tyrosine phosphorylation, or is antigenic.

3. (Amended) An isolated polypeptide comprising an amino acid sequence as set forth in SEQ ID NO: 5:

- (a) with at least one conservative amino acid substitution;
- (b) having a C- and/or N- terminal truncation; or
- (c) with at least one modification that is a conservative amino acid substitution, C-terminal truncation, or N-terminal truncation;

wherein the polypeptide upon exposure to mammalian cells, causes an increase in cellular protein tyrosine phosphorylation.

4. (Amended) An isolated polypeptide encoded by a nucleic acid molecule comprising a nucleotide sequence:

- (a) as set forth in SEQ ID NO: 4;
 - (b) of the DNA insert in ATCC Deposit No. PTA-976;
 - (c) encoding a polypeptide as set forth in SEQ ID NO: 5; or
 - (d) that hybridizes to the complement of the nucleotide sequence of any of (a) - (c)
- under hybridization conditions allowing no more than a 21% mismatch between the nucleotide sequences, wherein the encoded polypeptide upon exposure to mammalian cells, causes an increase in cellular protein tyrosine phosphorylation.

5. (Amended) An isolated polypeptide encoded by a nucleic acid molecule comprising:

- (a) a nucleotide sequence encoding a polypeptide that is at least about 70 percent identical to the polypeptide set forth in SEQ ID NO: 5, wherein the encoded polypeptide upon exposure to mammalian cells, causes an increase in cellular protein tyrosine phosphorylation;
- (b) a region of the nucleotide sequence of SEQ ID NO: 4, the DNA insert in ATCC Deposit No. PTA-976, or the nucleotide sequence of (a), wherein the encoded polypeptide

comprises at least about 25 amino acid residues, and wherein the encoded polypeptide upon exposure to mammalian cells, causes an increase in cellular protein tyrosine phosphorylation, or is antigenic; or

(c) a nucleotide sequence that hybridizes to the complement of the nucleotide sequence of (b) under hybridization conditions allowing no more than a 21% mismatch between the nucleotide sequences, wherein the encoded polypeptide upon exposure to mammalian cells, causes an increase in cellular protein tyrosine phosphorylation.

6. (Amended) An isolated polypeptide encoded by a nucleic acid molecule comprising a nucleotide sequence:

(a) encoding a polypeptide as set forth in SEQ ID NO: 5 with at least one conservative amino acid substitution;

(b) encoding a polypeptide as set forth in SEQ ID NO: 5 having a C- and/or N-terminal truncation;

(c) encoding a polypeptide as set forth in SEQ ID NO: 5 with at least one modification that is a conservative amino acid substitution, C-terminal truncation, or N-terminal truncation; or

a) (d) that hybridizes to the complement of the nucleotide sequence of any of (a) - (c) under hybridization conditions allowing no more than a 21% mismatch between the nucleotide sequences;

wherein the encoded polypeptide upon exposure to mammalian cells, causes an increase in cellular protein tyrosine phosphorylation.

7. (Amended) The isolated polypeptide according to Claim 2 or 3, wherein the percent identity is determined using a computer program that is GAP, BLASTP, FASTA, BLASTA, BLASTX, BestFit, or the Smith-Waterman algorithm.

a² 10. (Amended) The composition of Claim 8, wherein the polypeptide comprises an amino acid sequence as set forth in SEQ ID NO: 6.

a³ 13. (Amended) The polypeptide of Claim 12, wherein the water-soluble polymer is polyethylene glycol, monomethoxy-polyethylene glycol, dextran, cellulose, poly-(N-vinyl pyrrolidone) polyethylene glycol, propylene glycol homopolymers, polypropylene oxide/ethylene oxide co-polymers, polyoxyethylated polyols, or polyvinyl alcohol.

16. (Amended) A polypeptide produced by a process comprising culturing a host cell comprising a vector comprising a nucleic acid molecule comprising a nucleotide sequence:

- (a) as set forth in SEQ ID NO: 4;
- (b) of the DNA insert in ATCC Deposit No. PTA-976;
- (c) encoding a polypeptide as set forth in SEQ ID NO: 5; or
- (d) that hybridizes to the complement of the nucleotide sequence of any of (a) - (c) under hybridization conditions allowing no more than a 21% mismatch between the nucleotide sequences, wherein the polypeptide upon exposure to mammalian cells, causes an increase in cellular protein tyrosine phosphorylation;

under suitable conditions to express the polypeptide, and optionally isolating the polypeptide from the culture.

a⁴ 17. (Amended) A polypeptide produced by a process comprising culturing a host cell comprising a vector comprising a nucleic acid molecule comprising:

- (a) a nucleotide sequence encoding a polypeptide that is at least about 70 percent identical to the polypeptide set forth in SEQ ID NO: 5, wherein the encoded polypeptide upon exposure to mammalian cells, causes an increase in cellular protein tyrosine phosphorylation;
- (b) a region of the nucleotide sequence of SEQ ID NO: 4, the DNA insert in ATCC Deposit No. PTA-976, or the nucleotide sequence of (a), wherein the polypeptide comprises at least about 25 amino acid residues, and wherein the polypeptide fragment upon exposure to mammalian cells, causes an increase in cellular protein tyrosine phosphorylation, or is antigenic; or
- (c) a nucleotide sequence that hybridizes to the complement of the nucleotide sequence of (b) under hybridization conditions allowing no more than a 21% mismatch between the nucleotide sequences, wherein the polypeptide upon exposure to mammalian cells, causes an increase in cellular protein tyrosine phosphorylation;

under suitable conditions to express the polypeptide, and optionally isolating the polypeptide from the culture.

18. (Amended) A polypeptide produced by a process comprising culturing a host cell comprising a vector comprising a nucleic acid molecule comprising a nucleotide sequence:

- a4
- (a) encoding a polypeptide as set forth in SEQ ID NO: 5 with at least one conservative amino acid substitution;
 - (b) encoding a polypeptide as set forth in SEQ ID NO: 5 having a C- and/or N-terminal truncation;
 - (c) encoding a polypeptide as set forth in SEQ ID NO: 5 with at least one modification that is a conservative amino acid substitution, C-terminal truncation, or N-terminal truncation; or
 - (d) that hybridizes to the complement of the nucleotide sequence of any of (a) - (c) under hybridization conditions allowing no more than a 21% mismatch between the nucleotide sequences;

wherein the polypeptide upon exposure to mammalian cells, causes an increase in cellular protein tyrosine phosphorylation;

under suitable conditions to express the polypeptide, and optionally isolating the polypeptide from the culture.

REMARKS

Claims 1-7, 10, 13, and 16-18, as amended, and claims 8, 9, 11, 12, 14, 15, 19, and 20, as filed, are pending in the instant application. Support for the amendments to the claims can be found in the specification at, for example, page 2, line 27 to page 3, line 2; page 5, line 7; page 18, lines 8-14; and page 103, lines 19-27. No new matter has been added as a result of the above-described amendments. The rejections set forth in the Office Action have been overcome by amendment or are traversed by argument below.

1. Rejections of claims 1-9 and 11-20 under 35 U.S.C. § 112, first paragraph

The Office Action asserts a rejection of claims 2-9 and 11-20 under 35 U.S.C. § 112, first